Abstract of the Disclosure

A flame retarding and smoke suppressing additive powder that can be mixed with resins includes a carbonific material, a heat activated blowing agent, a heat activated halogen material, a phosphate material, and an inorganic material. The additive powder, when added to a curable or hardenable resin, forms a mixture where the additive powder is about 20-30%, by weight, of the mixture. The resin can be styrenic, olefinic, acrylic, cellulosic, polyester, or polyamide such as are commonly used in the manufacture of fiberglass reinforced structures and moldable plastics.